

TECHNICAL NOTES

Fertility Indicators in the MIMAROPA Region (2020 Census of Population and Housing)

I. Introduction

The Philippine Statistics Authority (PSA) conducted the 2020 Census of Population and Housing (2020 CPH) in September 2020, with 01 May 2020 as the reference date.

The 2020 CPH was the 15th census of population and 7th census of housing that was undertaken in the Philippines since the first census in 1903. It was designed to take an inventory of the total population and housing units in the country and collect information about their characteristics.

The Philippine Standard Geographic Codes as of April 2022 was used for the disaggregation of geographic levels of the 2020 CPH.

II. Data Limitation

The statistics presented in this report were based on the information provided by the respondent or any responsible household member who may provide accurate answers to the questions and give correct information about all the household members. Likewise, the statistics presented are based on responses from the 20 percent of the total households based on the 2020 CPH.

III. Methodology

III.1. Method of Enumeration

The population and housing censuses in the Philippines are conducted on a “de jure” basis, wherein a person is counted in the usual place of residence or the place where the person usually resides. The enumeration of the population and collection of pertinent data in the 2020 CPH referred to all living persons as of 01 May 2020.

Information on household characteristics contained in this release are based on the information provided by the household respondents and by observation of the enumerator during the data collection of the 2020 CPH.

The data on fertility indicators were collected for all females aged 15 to 49 years from a sample of 20 percent of the total number of households using CPH Form 3 (Sample Household Questionnaire) and CPH Form 7 (Self-Administered Questionnaire for Sample Household):

- a. Number of Children Born Alive (“*How many children have been born alive to ___?*”);
- b. Number of Children Still Living (“*From among the children who have been born alive to ___, how many are still living?*”);
- c. Number of Children Born Alive from May 1, 2019, to April 30, 2020 (“*From among the children who have been born alive to ___, how many were born alive from May 1, 2019, to April 30, 2020?*”); and
- d. Age at First Marriage (“*What was ___’s age at first marriage?*”)

III.2. Sampling Scheme

The 2020 CPH was carried out using a combination of complete enumeration and sampling. The sampling rate or the proportion of households selected as sample households was 20 percent.

The sampling rate for the city/municipality is applied to all enumeration areas (EAs) in the city/municipality. Each city/municipality was treated as a domain to obtain efficient and accurate population and housing estimates at the city/municipality level. A 20 percent systematic cluster sampling rate was adopted to minimize the enumerator’s selection bias.

In this sampling scheme, an EA was divided into clusters composed of five households each. Clusters were formed by grouping five households, assigned with consecutive numbers as they were listed. A sample selection of one in every five clusters of households was carried out, with the first cluster selected randomly. A random start was predetermined for each EA.

III.3. Estimation Procedure

The estimation procedure produces a set of household weights. The weights for each sample household corresponds to the number of households that the total household represents. These weights are applied to the sample data to produce estimates from the sample questionnaire. Estimates are summary measures calculated from the sample for various characteristics of interest.

Household weight is computed at the city/municipal level. Compute the household weight as the inverse of probability of inclusion at the city/municipality level. This can be done by determining the probability of inclusion for each city/municipality and then taking the inverse of this probability.

The inverse of probability of inclusion is computed as

$$HHwt_i = \frac{N_i}{n_i}$$

where N_i is the total number of households in the i -th city/municipality, n_i is the total number of sample households in the i -th city/municipality, and $HHwt_i$ is the household weight for all households in the i -th city/municipality.

The computed household weight at the city/municipality level was further calibrated to ensure that the resulting tables will conform to that of the household distribution in terms of tenure status of the housing unit/lot.

IV. Concepts and Definition of Terms

Number of Children Born Alive

Data on the number of children ever born alive to a particular woman is an aggregate measure of her fertility experience up to the moment the data are collected. Cross tabulation of this variable with other variables will enable computation of principal measures, such as the mean number of children born alive to women who have reached the end of their child-bearing period, and the proportion of women who are childless by the end of their reproductive life.

The number of children born alive to a woman should comprise all her live-born children, if any, as of census reference date:

- children born of present marriage;
- children born of previous marriage/s;
- children born outside of marriage; children born alive but no longer surviving;
- children still living and residing with the household; and
- children living elsewhere at the time of the interview.

As defined by the World Health Organization (WHO), **live birth** is the complete expulsion or extraction from its mother of a product of conception, irrespective of the duration of pregnancy, which after such separation, breathes or shows any other evidence of life, such as beating of the heart, pulsation of the umbilical cord, definite movement of voluntary muscles, whether or not the umbilical cord has been cut or the placenta is attached. Each product of such a birth is considered **live-born**.

The following are to be excluded from the count of children ever born alive to a female member aged 15 to 49 years:

1. **Stillbirth** – the UN defines stillbirths as fetal deaths of 28 completed weeks of gestation or more. The death is indicated by the fact that after separation from its mother, the fetus does not breathe or show any evidence of life, such as beating of the heart, pulsation of the umbilical cord or definite movement of voluntary muscles.
2. **Adopted** – a child or ward who is considered part of the family although he/she may not be related by blood to the guardian.
3. **Stepchild** – a child of a woman's husband with his former wife/partner.

Number of Children Still Living

This refers to the number of children who are still living out of the total number of children ever born that was reported. In no case, however, should the number in item children ever born exceed the number reported in this item.

Data on the number of children who are still living are used in the calculation of mortality indicators.

Number of Children Born Alive from May 1, 2019 to April 30, 2020

This question refers to the number of children born alive to a woman during the last 12 months. Data on the number of births in the last 12 months are used in estimating indicators of current fertility of women, such as total fertility rate and age-specific fertility rate.

Age at First Marriage

Age at first marriage provides information on the woman's entry into first marital union, which exposes her to higher chance of childbearing. Age at first marriage is associated with fertility of women. Women who marry at younger age are more likely to have more children than women who marry at later age.

Marriage includes either legal or consensual union (where the man and the woman decide to live together without legal marriage, that is, church wedding or civil ceremony).

Age at first marriage is the age at which the woman first entered married life or consensual union. In a consensual marriage, it is the age of the woman when she and the man began to live together as husband and wife.